DOCUMENT RESUME

ED 306 288 TM 013 149

AUTHOR Butler, E. Dean
TITLE Initial Teacher Licensure Testing in Tennessee: Test Development.
PUB DATE Nov 88
NOTE 10p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (17th, Louisville, KY, November 9-11, 1988).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS College Faculty; Content Analysis; Higher Education; *Item Banks; Knowledge Level; *Licensing Examinations (Professions); Public School Teachers; State Programs; *State Standards; *Teacher Certification; Teacher Educators; *Test Construction; Testing Programs; Test Items; Test Use; Test Validity
IDENTIFIERS Comprehensive Education Reform Act (Tennessee); Standard Setting; *Teacher Competency Testing; Tennessee; Tennessee State Department of Education

ABSTRACT

The process of development of tests for teacher certification in Tennessee is described. In response to the Tennessee Comprehensive Education Reform Act of 1984 requiring the use of tests for individuals seeking initial teacher licensure, the Department of Education identified 12 areas of teacher endorsement for which no currently validated and applicable tests existed. The team responsible for test development consists of two co-directors and four test development specialists from the faculties of two institutions of higher education in Tennessee. A panel of college faculty in teacher preparation and classroom teachers is created to draft test specifications under the supervision of the project team. A validation review panel of classroom teachers and college professors in the subject matter then reviews the tests for job relevance. Final specifications are given to an item-writing panel of individuals representing school systems and teacher preparation programs in the state. This panel creates a bank of approximately 500 test items to reflect content and knowledge level of the specifications. After review by new panels of educators, items are forwarded to a national testing agency for sensitivity review, assembly into forms, production, and administrative processes. Of the 12 areas targeted, tests have been initiated for 8 areas. (SLD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED306288

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

E. Dean Butler

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Initial Teacher Licensure Testing in Tennessee: Test Development

E. Dean Butler
Memphis State University

Discussants:

E. Dean Butler and Todd Davis, Memphis State University;
Charles Faires and Michael Smith,
University of Tennessee, Knoxville

Presented in the Symposium:
Initial Teacher Licensure Testing In Tennessee

Mid-South Educational Research Association Annual Meeting
Louisville, Ky
November, 1988

TM013149

Introduction

In 1984, the Tennessee General Assembly passed legislation (Comprehensive Education Reform Act) which required a core battery and endorsement area tests for individuals seeking initial licensure as pubic school teachers. In order to meet the requirements of the legislation pertaining to endorsement area tests, three major developments occurred: restructuring of the certification areas from over 100 to approximately 40; initiation of validation studies for appropriate tests available; and plans made to develop tests for areas for which no tests existed. Personnel of the Department of Education, State of Tennessee identified 12 areas of teacher endorsement for which no currently validated and applicable tests existed or could be anticipated as projects of current development efforts. In 1986, two institutions of higher education in the state were engaged to develop tests for these 12 areas with technical assistance provided by a national testing agency. Conceived as a three-year project initially, developmental efforts began in July, 1987. Summarized here are components and strategies of the project, current status of the project, and future plans.

Components and Strategies

Project Team.

The team responsible for the test development project consists of two project co-directors, four test development specialists, support/technical staff, and consultants. The co-directors and test development specialists are faculty members of the two institutions of higher education holding the contract with the State of Tennessee.

Training of the Project Team.

Training of the team was provided by consultants with specific focus being on project background and perspective; project description and schedule; overview of the test development sequence including technical aspects of item development and validation; procedures for facilitating the work of the panels; and recommendations for insuring production and quality control dimensions.

Test Specifications and Item Writing Panels: Nominations, Screening, Tasks, and Training

Two panels are created for the purposes of developing the test specifications and writing the items. Other panels are formed to review/revise the initial set of items and prepare/validate other items needed.

Panelists responsible for drafting the test specifications are college faculty and classroom teachers

nominated by college/university education deans/department heads and school superintendents. Individuals nominated have academic preparation and teaching experiences relevant to the test being developed. The project team makes the final selection seeking representation from the different types of teacher preparation institutions in the state and types of public school systems.

Nominations for individuals to serve on the test development panel are also solicited from chairman/deans of education and school superintendents. Persons interested in serving on the panel submit personal information and sample test items they have prepared. The project team reviews the materials submitted and selects the panel members, based on test items writing skills and representation of the variety of school systems and teacher training institutions in the state.

Test Development Process

Preparation of Initial Specifications. The specifications panels are convened to develop blueprint dimensions for each examination. Following a half-day of task orientation and training, each panel prepares a statement of purpose for the examination which includes information relative to decisions to be influenced by the test (why) and the intended test candidate population (who). Once there is an agreed upon purpose statement, the test

specifications are formulated, including identification of the content domains and knowledge/skill categories, levels of knowledge and skill applications to be tested by category, and weights assigned to the content domains.

Job Relevance Validation. The statement of purpose and the specifications for each test are printed in a two dimensional table for submission to validation reviewers. Reviewers are requested to critique the comprehensive, emphases, and job-relevancy of the topics and subtopics contained in the specifications. Members of the validation review panel are classroom teachers and college professors currently teaching the subject matter of the examination. Draft specifications review forms, which are mailed to this panel, contains information relative to the test development project, instructions regarding the task requested of the job-relevance validation panel, and a profile of the test domains with the initial weights assigned by the test development panel. Panel members are requested to review the draft specifications and evaluate the relative importance of each topic area, and subtopics, in regard to successful performance of a teacher of that subject. Ratings are solicited for each topic area and suggestions for other topics that they feel should be added. Individual ratings and suggestions are combined into a report for submission to the original test specifications panel.

Preparation of Final Specifications. The panel that drafted the original specifications is reconvened to review the results of the job-relevance validation and draft the final specifications. Once revisions are made, the test specifications are judged as verified with comprehensiveness, emphases, and job-relevancy established.

Item Writing. Panelists selected to prepare the test items are convened for two-day sessions of orientation, item writing training, review of the test specifications, and item writing. A production control agenda is followed which specifies time for item writing, panel review/critique of items, and inventory sessions with reassignments made, as needed, for creation of additional items. Quality control aspects include review of each item by test development specialists/consultants and by at least one member of the panel. The goal is to create a bank of approximately 500 test items reflecting the content areas and levels of knowledge/skill specified in the blueprint.

Item Review, Editing, and Preparation/Validation of Additional Items. The original items are entered into IBM software data files with appropriate coding information. Printed copies are made of the items, without keys, for scoring by independent reviewers. Reviewers are asked to score each item and make comments relative to ambiguity, technical problems, and other needed revisions. Keyed

responses to the items are compared to the original keys and all comments and suggestions summarized by individual items. New panels are convened to review the item pool summaries and to revise, discard, and, if necessary, generate and validate additional items needed so that three equivalent forms of the tests might be created.

Test Assembly, Pilot Testing, Test Production, Administration, and Further Analyses. The complete set of items are forwarded to a national testing agency for additional sensitivity review, assembly into forms, test production, administration, and other post-administrative analyses.

Current Status

The test development schedule may be summarized as follows:

1. Establish Test Purpose and Specifications
2. Verify Test Specifications
3. Prepare Questions
4. Review and Edit Questions
5. Test Assembly
6. Pilot Testing
7. Final Form Assembly
8. Test Production
9. Test Administration
10. Post Administration Activities

Of the 12 areas initially targeted for test development activities, 8 have been initiated. Four sets of items (American History, Economics, Sociology, and Political Science) have been created and forwarded to a testing agency for test assembly. Four other item banks are under development (General Science, Geography, Office Technology, and Accounting) with the initial sets of items prepared. These items are now scheduled for review, editing, and revision.

Future Plans

Plans at the present include completing the revisions of the second group of items and forwarding them to the testing agency for final assembly. Plans have been made for test assembly, pilot testing, final form assembly/production/and administration, and post administration activities of item analysis, standard setting, and test revisions for the eight tests under development at this time.